ABSTRACT OF THE DISCLOSURE

A signal transmission method checks, when detecting an occurrence of a communication request, whether the communication request is a high speed communication (step S302). In the case of the high speed communication, it checks whether the number of current high speed communications (m) plus one is greater than the upper limit (m_{max}) of the high speed communication (step S312). If greater, it cancels the request as a call loss (S316), and sets to a variable a the ratio (h) of the rate of the high speed communication to that of a low speed communication. If the communication request is the low speed communication, it sets one to the variable a (step S304). It compares n plus a with n_{max} (step S306), where n is the total number of all the current communications, a is the value associated with the communication request, and n_{max} is the upper limit of the number of communications acceptable in a bandwidth, all of which are expressed in terms of the number of the low speed communications. If n plus a is greater than n_{max}, the communication request is canceled as a call loss (S316). Otherwise, the total number of the current high speed communications (m) and the total number

of all the current communications (n) expressed in terms of the number of the low speed communications are updated, and a channel is assigned to the communication request (step S310).